How are Sanctuaries Involved in Noise?

- NOAA is developing an Ocean Noise Strategy that incorporates the importance of managing the "acoustic habitats" of marine animals in places such as National Marine Sanctuaries using a comprehensive, agency-wide approach. A draft will be released later In 2014.
- The Office of National Marine Sanctuaries (ONMS) recently formed an Ocean Noise Working Group, comprised of staff and experts from multiple National Marine Sanctuaries, to collaborate on system-wide projects including:
 - o Involving multiple NMS sites in NOAA's development of a network of noise monitoring stations that will collect multiyear, continuous, and comparable data to establish baselines and detect changes across regions within the National Marine Sanctuary system.



HARP deployment - high-frequency acoustic recording package

- Developing education and outreach products to relay information on Sanctuary Soundscapes to a variety of audiences, and which will link to a website with specific ONMS Sentinel site projects.
- Stellwagen Bank National Marine Sanctuary (SBNMS) has been working to characterize this sanctuary's soundscape and quantify loss of acoustic habitat for right whales with the growth of commercial shipping traffic. Noise related studies at this sanctuary have expanded to tackle questions connected to acoustic metrics as indicators of biodiversity, sounds and fish behavior, and using passive acoustic monitoring to protect spawning fish. Their SAC recently wrote a letter to D. Basta to ask for support for this project.
- Monterey Bay National Marine Sanctuary Advisory Council is interested in better understanding acoustic impacts in the sanctuary. Over the past year, due to interest on this issue by the Conservation Working Group, the Sanctuary Advisory Council has received educational presentations on acoustic issues in the Sanctuary. For an example, visit the following URL for a NOAA Fisheries scientist on "Assessing and mitigating impacts of anthropogenic sound on marine mammals" in the MBNMS http://montereybay.noaa.gov/sac/2014/140425/140425anthropogenicsound ppt.pdf
- Researchers from institutions around Monterey Bay are collaborating on a new "Sanctuary Soundscape Project" that will integrate accelerometry acoustic tags with passive acoustic monitoring to improve our understanding of the acoustic environment in the MBNMS as well as whale abundance and distribution in the Sanctuary. Collaborators include: NPS, MLML, Hopkins Marine Station, MBARI and MBNMS.
- During the 1990's, MBNMS was involved with two large-scale Naval projects Acoustic Thermometry of Ocean Climate (ATOC) and Low Frequency Active Sonar (LFAS). Due to concern over "persistent ensonification" of Sanctuary waters, the ATOC cable was eventually moved out to Pioneer Canyon. For the LFAS project, ONMS collaborated with the Navy to devise a zoning scheme that would guide the longer-term use to minimize risks to marine species. More recently in 2012, MBNMS worked with NOAA Fisheries and a number of partners on a proposal by PG&E to conduct high energy seismic surveys near the Diablo Canyon power plant, just south of MBNMS. Ultimately, the California Coastal Commission, primarily due to potential harm to marine wildlife, did not approve the survey.